ABSTRACT

The invention calculates an optimum etch recipe for etching a product pattern in an opaque material of a photolithographic exposure mask with the objective of achieving optimum CD performance of the product pattern. If, for this optimum etch recipe, the optimum CD performance cannot be achieved, dummy patterns are added to the mask that is used to etch the opaque material. If this latter approach still cannot achieve optimum CD performance, the product pattern to which the dummy pattern has been added is separated into two patterns such that one of these two patterns provides a Cr loading that assures optimum CD performance of the product pattern.